OPTIMAL ROUTE SELECTION IN A CONTENT DELIVERY NETWORK

ABSTRACT OF THE DISCLOSURE

A routing mechanism, service or system operable in a distributed

5   networking environment. One preferred environment is a content delivery

network (CDN) wherein the present invention provides improved connectivity

back to an origin server, especially for HTTP traffic. In a CDN, edge servers are

typically organized into regions, with each region comprising a set of content

servers that preferably operate in a peer-to-peer manner and share data across a

10   common backbone such as a local area network (LAN). The inventive routing

technique enables an edge server operating within a given CDN region to retrieve

content (cacheable, non-cacheable and the like) from an origin server more

efficiently by selectively routing through the CDN's own nodes, thereby avoiding

network congestion and hot spots. The invention enables an edge server to fetch

15   content from an origin server through an intermediate CDN server or, more

generally, enables an edge server within a given first region to fetch content from

the origin server through an intermediate CDN region. As used herein, this

routing through an intermediate server, node or region is sometimes referred to as

"tunneling."

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